



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-7F
 UNIQUE ID NUMBER: 1PW023
 COMBUSTOR: Mod VI
 ENGINE TYPE: TF

BYPASS RATIO: 5.1
 PRESSURE RATIO (π_{00}): 22.8
 RATED THRUST (F_{00}) (kN): 213.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	70.1	153.6	73.1	20.8
AS % OF ORIGINAL LIMIT	357.7	130.2	85.4	108.2
AS % OF CAEP/2 LIMIT (NO _x)			106.7	
AS % OF CAEP/4 LIMIT (NO _x)			131.8	
AS % OF CAEP/6 LIMIT (NO _x)			149.7	
AS % OF CAEP/8 LIMIT (NO _x)			182.8	

DATA STATUS

x PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.161	0.00	0.90	41.70	16.0
CLIMB OUT	85	2.2	1.779	0.00	0.90	31.50	
APPROACH	30	4.0	0.624	0.60	5.80	9.10	
IDLE	7	26.0	0.232	25.90	68.60	3.20	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			837	9464	25989	13703	-
NUMBER OF ENGINES				1	1	1	
NUMBER OF TESTS				1	1	1	
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				45.5	125.1	63.1	16.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	
AWS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 16/09/1980

REMARKS

1. Mod VI combustor

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)